## ABSTRACT OF THE DISCLOSURE

A high voltage transformer for a microwave oven includes a core, and primary and secondary coils. An insulation molding part encloses at least a part of the secondary coil and has a sensor accommodation portion formed therein. A temperature sensor is accommodated in the sensor accommodating portion for detecting temperature of the secondary coil. The sensor accommodating portion can be formed inside of the insulation molding part together with the temperature sensor, or formed outside of the insulation molding part in a pocket shape. With either configuration, the temperature sensor can be positioned at the correct sensor position, thereby improving the detecting accuracy of the temperature sensor. In addition, it is easy to repair and/or replace the temperature sensor.